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Hans Beer

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CROWELL & MORING LLP
INTELLECTUAL PROPERTY GROUP
P.O. BOX 14300
WASHINGTON, DC 20044-4300

EXAMINER

ALEXANDER, LYLE

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Please find below and/or attached an Office communication concerning this application or proceeding.

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/051,459
Filing Date: January 22, 2002
Appellant(s): BEER ET AL.

Mark H. Neblett
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/29/08 appealing from the Office action mailed 6/27/08.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,826,129	Hasebe et al.	10-1998
5,628,960	Beer et al.	05-1997

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-2 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beer et al. alone or further in view of Hasebe et al.

Beer et al. teach a process of producing a cellulose acetate or nitrate membrane by casting directly on a film. Column 3 lines 45-54 teach removing impurities, such as dust, by the addition of water and methanol prior to drying the film. The Office has read this as teaching the desirability to remove dust from the membrane prior to drying the membrane. Column 3 line 2 teaches the pore size range in the cast membrane is between 0.45 and 15 microns and has been read on the claimed pore size range of 0.01 to 12 microns.

Beer et al. are silent to the claimed steps of "mechanical while rinsing with water."

It is notoriously well known in the art to first "brush" a surface to remove/loosen dust and rinse the surface with water to remove any of the loosened dust particles. Brushing is a notoriously well known method of removing dust. Water is notoriously well known in the art as a desirable rinsing fluid because it is inert, non-hazardous, inexpensive and readily available. It would have been within the skill of the art to modify Beer et al.'s step of dust removal prior to the drying of the membrane and mechanically brush the surface of the membrane and rinse the brushed surface with water to gain the well known and expected results of removing/loosening surface dust and removal of the loosened dust from the surface.

Hasebe et al. teach in column 1 lines 13-37 dust removal from silicone wafer surfaces by first brushing and spraying with water is well known in the art. This process

is desirable because it minimizes the possibility of the removed contaminants becoming airborne and re-contaminating the surface, removes/looses contaminants that may be statically charged and sticking to the surface and concentrates the contaminants in an aqueous solution for easier disposal. It would have been within the skill of the art to modify Beer et al. in view of Hasebe et al. and modify the dust removal step by including mechanical brushing and a water rinse to gain the above advantages.

(10) Response to Argument

Response to section "1."

Appellant traverses the rejection over Beer et al. alone stating the steps of brushing and rinsing would not have been obvious. Appellant states "Exhibit I", which was previously submitted to the Office as a 1.132 Declaration on 2/10/06, clearly demonstrates that one having ordinary skill in the art would have expected brushing of membranes would have been expected to damage/destroy the membrane.

The 2/10/06 1.132 Declaration gives the opinion of the inventor, Dr. Hans Beer, that mechanical brushing prior to the drying would have been expected to destroy the membrane. MPEP section 716.01(a)III cites " ... In re Beattie, 974 F.2d 1309, 24 USPQ2d 1040 (Fed. Cir. 1992) (declarations of seven persons skilled in the art offering opinion evidence praising the merits of the claimed invention were found to have little value because of a lack of factual support); Ex parte George, 21 USPQ2d 1058 (Bd. Pat. App. & Inter. 1991) (conclusory statements that results were "unexpected," unsupported by objective factual evidence, were considered but were not found to be of substantial evidentiary value). Although an affidavit or declaration which states only

conclusions may have some probative value, such an affidavit or declaration may have little weight when considered in light of all the evidence of record in the application. In re Brandstadter, 484 F.2d 1395, 179 USPQ 286 (CCPA 1973)."

The 2/10/06 Declaration contains conclusionary statements and lacks factual evidence. The Office holds Dr. Beer's statements and opinions in high esteem. However, based upon the above MPEP teachings, the Declaration did not have sufficient weight to overcome the rejections of record.

Appellant states "Exhibit 2" is a 1.132 Declaration that was submitted on "12/12/06." The Office has considered the file history and notes there was no 1.132 Declaration submitted on 12/12/06. There was such a Declaration submitted on 9/28/06. The Office it will be assumed this was a typographical error and 9/28/06 was the intended date.

The Office has fully considered the 9/28/06 Declaration and this Declaration is not persuasive because it is not commensurate in scope with the pending claims. Claim 1 paragraph (a) requires "preparing a feedstock membrane from a cellulose membrane casting solution by phase inversion in an evaporation process" which has not been taught in the 9/28/06 Declaration. Additionally, claim 1 paragraph (b) requires "prior to dryingremoving filter dust impurities by mechanical brushing..." which differs from the Declaration that only teaches "rotational brush". Finally, the Declaration states the membrane is impregnated with sodium alkyl sulfonate. However, sodium alkyl sulfonate is not presently claimed or even taught in the instant specification. For these reasons, the 9/28/06 1.132 Declaration is not convincing.

Appellant states the 5/30/07 final Office action cited Hasebe et al. as a teaching it is known to brush and rinse. Appellant states any teachings of Hasebe et al. is not relevant because the taught "rock hard silicon substrates" are dissimilar to the claimed "extraordinarily delicate, partially dried membranes." Appellant has not provided any reasoning why Hasebe has been improperly applied. The Office maintains the rejections of record are proper.

Response to section "2."

Appellant states the Office has failed to consider "the invention as a whole" because the Office has not addressed the difference between Beer et al. and the instant invention. Appellant states Beer et al. requires "expensive pre-purification of the feedstock material" whereas the instant invention does not. These remarks are not commensurate in scope with the pending claims. The instant claim language is open and does not exclude pre-purification of the feedstock. The Office maintains all of the rejections of record are proper.

Appellant states the Office has not properly viewed the invention as a whole in light of the two 35 USC 1.132 Declarations. The Office has addressed the two 35 USC 1.132 above and maintains the Declaration were not convincing. The Office maintains all of the Declarations and remarks by Appellant have been fully and properly considered.

Response to section "3."

Appellant states Beer et al. fails to teach the claimed mechanical brushing while rinsing the membrane prior to the drying of the membrane. The Office maintains Beer

et al. teach in column 3 lines 52-54 steps to remove substances responsible for the creation of "filter dust" prior to the drying of the membrane. Next the Office takes the position that brushing while rinsing is notoriously well known in the art or alternatively is obvious in view of Hasebe et al. The Office believe all of these rejections are proper.

Appellant states Hasebe et al. is non-analogous art and cannot be combined with Beer et al. MPEP 2141.01(a) teaches the correct analysis to determine the analogy of the art " ... requires the need or problem known in the field of endeavor at the time of the invention and addressed by the patent [or application at issue] can provide a reason for combining the elements in the manner claimed." KSR International Co. v. Teleflex Inc., 550 U.S. ___, ___, 82 USPQ2d 1385, 1397 (2007). Thus a reference in a field different from that of applicant's endeavor may be reasonably pertinent if it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his or her invention as a whole."

In response to applicant's argument that Hasebe et al. is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Hasebe et al. addresses removal of dust from the surface of a semiconductor chip that is required to be clean and free of dust. The same problem of dust removal/minimization is recognized by Beer et al. in column 3 lines 52-54. The

Office maintains both Hasebe et al. and Beer et al. are analogous art because both recognize problems with surface dust.

Response to section "4."

Appellant states the 35 USC 103 rejections of the claims over Beer et al. do not comply with KSR. The Office maintains KSR teaches "use of known techniques to improve similar devices (methods or products) in the same way." The Office maintains that brushing a surface while rinsing with water is notoriously well known in the art to achieve the well known and expected results of loosening/removing contaminating particles, such as dust, and washing the particles off the surface with the water. The Office maintains all of the rejections of record are proper.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Lyle A Alexander/

Primary Examiner, Art Unit 1797

Conferees:

Jill Warden

/PATRICK RYAN/

Supervisory Patent Examiner, Art Unit 1795

